

*Patent*  
What is claimed is:

1. A rewritable multi-layer optical recording medium having a plurality of recording layers, wherein data recording areas are divided by preformatted areas in a tracing direction in each of the plurality of recording layers,

wherein the preformatted areas in at least a most distal recording layer among the plurality of recording layers from an object lens adapted to collect a radiated light beam include guard areas located at both ends of the respective preformatted areas in the tracing direction and having no data recorded thereon, and wherein the length of the guard area GL satisfies;

$$GL \geq YL + T \times (NA/n) / [1 - (NA/n)^2]^{1/2}$$

where,

15 YL: a maximum allowable value of position deviation between the preformatted areas in the most distal recording layer and in another recording layer in the tracing direction

NA: the numerical aperture of the object lens

20 T: a distance between the most distal recording layer and *Said* the another recording layer

n: <sup>*the*</sup> refraction index of a medium between the most distal recording layer and *Said* the another recording layer.

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2. A rewritable multi-layer optical recording medium according to claim 1, wherein each of the plurality of recording